



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

411

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/528,803

04/07/2005

Gerhard Kern

123295

9155

25944

7590

06/01/2007

OLIFF & BERRIDGE, PLC
P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

BRAINARD, TIMOTHY A

ART UNIT

PAPER NUMBER

3662

MAIL DATE

DELIVERY MODE

06/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/528,803

Applicant(s)

KERN ET AL.

Examiner

Timothy A. Brainard

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/23/2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>PTO-1449</u> |

DETAILED ACTION

Claim Objections

Claims 4-14 and 19-22 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim depends on a multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4-14 and 19-22 have treated as depending on the broadest claim from which each individual claim is dependent.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 6-8, and 20-22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "in particular or preferably" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions

Art Unit: 3662

of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 1 recites the broad recitation one position mark, and the claim also recites "one position mark preferably a crosshair..." which is the narrower statement of the range/limitation. In the present instance, claim 1 recites the broad recitation a radiation beam coordinated with an optical component, and the claim also recites is emitted by means of this component which is the narrower statement of the range/limitation. In the present instance, claim 6 recites the broad recitation position "...mark can be positioned by input means...", and the claim also recites "...position mark can be positioned by input means in discrete step and pixel by pixel..." which is the narrower statement of the range/limitation. In the present instance, claim 7 recites the broad recitation "...the positioning of the position mark the measuring process is initiated...", and the claim also recites "...the positioning of the position mark the measuring process is initiated in particular the control of the recording means...", which is the narrower statement of the range/limitation. In the present instance, claim 8 recites the broad recitation "measuring range can be made smaller, can be made larger, and/or can be changed in its resolution by the recording means and/or display means", and the claim also recites "...measuring range can be made smaller, can be made larger, and/or can be changed in its resolution by the recording means and/or display means in particular by a variation of the, preferably electronic assignment of the data pixels..." which is the narrower statement of the range/limitation. In the present instance, claim 20 recites the broad recitation position "...the receiving device are guided via the alignment

Art Unit: 3662

means...", and the claim also recites "...the receiving device are guided via the alignment means, in particular a transmissive double wedge rotatable relative to one another." which is the narrower statement of the range/limitation. In the present instance, claim 22 recites the broad recitation position "...are mounted so as to be movable independently of an alignment of the geodetic measuring device...", and the claim also recites "...are mounted so as to be movable independently of an alignment of the geodetic measuring device, in particular pivotable about a horizontal axis." which is the narrower statement of the range/limitation. In the present instance, claim 21 recites the broad recitation position "...the orientation means have a device... for alignment of the geodetic measuring device relative to a reference point... necessary for acquisition of the measuring range into an orientation for detection of the reference point." and the claim also recites "...the orientation means have a device, in particular attachable device, for alignment of the geodetic measuring device relative to a reference point, preferably a triangulation point, in particular in association with a movement of the recording means from the orientation necessary for acquisition of the measuring range into an orientation for detection of the reference point." which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 4-12, 14-19, 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Ball (WO 99/60335). Ball teaches a (claim 1 and 15) display and control device for a geodetic measuring device which has a radiation source for emission of a visible or invisible radiation beam for carrying out a measuring process comprising an electronic display means for visual display of a measuring range acquired by (claim 1 and 15) recording means (page 2, lines 1-13), (claim 1 and 18) one position mark, (claim 1 and 17) an input means for inputting data and controlling the recording means and the measuring process (page 20 line 33 to page 21, line 2), fixing of a (claim 1 and 15) measuring point for three-dimensional surveying being determined by positioning of the position mark (fig 21 and page 25, lines 11-26), (claim 1 and 16) an alignment means presented which permit variable alignment of the emission direction of the radiation beams relative to the orientation of the recording means with the alignment means and recording means being designed and arranged so that the radiation beam is coordinated at least partially with one optical component of the recording means in particular is emitted by means of this component and determining the fixing of a measuring point of three-dimensional surveying (page 2, lines 11-13), (claim 2) the alignment means is designed so that the alignment of the radiation beam is effected in such a way that the display of the acquired measuring range the position of the radiation beam is made to coincide with the position mark so that the radiation beam is utilized for carrying out the measuring process (page 2, line 11-13 and page 25 line 11-26), (claim 4) a calibration control device present which has an image sensor which detects the emission direction of the radiation beam so that detection of the radiation beam

Art Unit: 3662

independently of the recording means (page 8, lines 15-26), (claim 5) the display means is designed so that display of the radiation beam in the measuring range is effected by at least one pixel displayed in a distinguishable manner by direct optical imaging of the radiation within the recording means (page 25, lines 11-26), (claim 6) the position mark can be positioned by the input means within the visual display (page 26, lines 15-23), (claim 7) the input means are designed so that by positioning of the position mark at least a part of the measuring process is initiated (page 25, lines 11-26), (claim 9) the recording means comprises a CCD camera (page 2, line 17) (claim 11) the display means comprises of an LCD display (page 2, lines (23-24), (claim 12) the input means comprises a computer mouse, (claim 14) the recording means and alignment means are an independent module connected by a wired connection (fig 3, item 50 and 80 and fig 5 item 120), (claim 19) the radiation source and the receiving device are arranged on a movable support (fig 2, item 62 and 70), (claim 21) the orientation means has a device for alignment of the geodetic measuring device relative to a reference point in from the orientation necessary for acquisition of the measuring range into an orientation for detection of the reference point (page 2, line 1-13), (claim 22) the input means and the display means are mounted so as to be movably independent of an alignment of the geodetic measuring device (fig 2), a module component for geodetic surveying comprising integrated input means and/or display means of a geodetic measuring device a means for establishing a wire connection or radio link (fig 5 and page 13, lines 26-36).

Claim Rejections - 35 USC § 103

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ball as applied to claim 1 above, and further in view of Bleckmann et al (US 2002/0148549). Bleckmann teaches servo elements for two-dimensional movement of the radiation source (para 58). It would have been obvious to modify Ball to include servo elements for two-dimensional movement of the radiation source because it is one of multiple design choices with no new or unexpected result.

Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ball as applied to claim 1 above, and further in view of Tseng (US 2003/0099470). Tseng teaches the visual display of the acquired measuring range can be made smaller, can be made larger, and/or can be changed in its resolution by the recording measuring means and or display means and the recording means have an auto-focus system which is part of the objective (para 4). It would have been obvious to modify Ball to include the visual display of the acquired measuring range can be made smaller, can be made larger, and/or can be changed in its resolution by the recording measuring means and or display means and the recording means have an auto-focus system which is part of the objective because it would allow the display to zoom in and out and maintain the clarity of the display.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ball as applied to claim 1 above, and further in view of Lai et al (US 2003/0016247). Lai teaches the electric display means and the input means are combined in one

Art Unit: 3662

component (para 35). It would have been obvious to modify Ball to include the electric display means and the input means are combined in one component because it is one of multiple design choices with no new or unexpected results.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ball as applied to claim 15 above, and further in view of Kaushal (US 2003/0047683). Kaushal teaches the radiation source, receiving device, and alignment means are formed and arranged in such a way that both radiation emitted by the radiation source and radiation to be received by the receiving device are guided via the alignment means (fig 5, item 24). It would have been obvious to modify Ball to include the radiation source, receiving device, and alignment means are formed and arranged in such a way that both radiation emitted by the radiation source and radiation to be received by the receiving device are guided via the alignment means because it is one of multiple design choices with no new or unexpected results.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ball as applied to claim 15 above, and further in view of Fritzel (US 2003/0122078). Fritzel teaches at least two geodetic measuring devices and one module component being in the form of common input means and/or display means for at least two measuring devices (para 61). It would have been obvious to modify Ball to include at least two geodetic measuring devices and one module component being in the form of common input means and/or display means for at least two measuring devices because it would make the data about an area more accurate.


Art Unit: 3662

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy A. Brainard whose telephone number is (571) 272-2132. The examiner can normally be reached on Monday - Friday 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAB


THOMAS H. TARCZA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600